

STEELGRID HR30 MESH COOKSBRIDGE (RAIL), UK

SLOPE STABILISATION - MACRO SYSTEMS

Product: Steelgrid HR30 Mesh & Steelgrid HR System Plates

Problem

Following the failure of a cutting slope, a geotechnical investigation revealed the presence of a number of slip areas in the vicinity of a retaining wall. The decision taken was to stabilise the slips using soil nails and a high strength facing mesh instead of replacing the retaining wall.

The design solution covered a 200 linear meter length of trackside slope which varied in height from 12m to 30m. The stabilisation design included over 680 soil nails, each up to 6m in length, with a high stiffness, high strength mesh facing.

Solution

The main contractor Volker Fitzpatrick approached Maccaferri for the supply of a suitable mesh product for the stabilisation of the rail cutting.

Maccaferri worked closely with the designer to establish the most suitable product for the stabilisation. Steelgrid HR30 was deemed to be the most appropriate material.

The mesh was installed with a regular anchorage pattern and in certain areas, over a biodegradable erosion control matting. Steelgrid HR benefits include:

- No requirement for the overlapping of mesh panels
- no need to make depressions around the anchorages
- No need to "pretension" mesh

These advantages made Steelgrid HR30 rapid to install, simple and a cost effective option for this high profile project.

Client:

NETWORK RAIL

Main contractor:

VOLKER FITZPATRICK

Designer:

TONY GEE AND PARTNERS

Products used:

3,500 M3 STEELGRID HR30 & HR PLATES

Date of construction

AUTUMN/WINTER 2011



Steelgrid HR30 mesh following installation



Steelgrid HR30 mesh following installation



Steelgrid HR30 mesh underlain by Coir blanket

Officine Maccaferri S.p.A. Global Headquarters

Via JF Kennedy 10, 40069 Zola Predosa (BO) - Italy

T: (+39) 051 6436000 F: (+39) 051 236507

E: comes@maccaferri.com

www.Maccaferri.com

Bureau Veritas Certified Quality System Company
with SINCERT and UKAS accreditation.